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ABSTRACT

Four areas--health benefits, occupational safety and health, prevention and wellness, and human resource development--have contributed significantly to enhancing worker health. The "healthy corporation" is both a goal and a comprehensive attitude about organizational life and about the factors the affect organizational health and, ultimately, organizational profitability. The work environment, employee health, and the larger environment all have an effect on employee health and organizational profits. Many factors can have a negative impact on organizational health, including a negative physical environment, work overload (too much work with inadequate resources), repetitious or monotonous work, shift work, inadequate ventilation, the necessity of spending long periods of time at video display terminals, and job-related stress. Possible approaches to alleviating the negative impact of these factors include job redesign, redesign of physical settings, improvement of hygiene and safety programs, and consideration of stress management techniques when defining work tasks. When employees feel a lack of control over their jobs and conditions or an inability to participate in managerial decisions, they are more likely to feel undue stress and be subject to its adverse effects. Other sources of job-related stress include tense work relationships, lack of career progression, unclear work roles, poorly managed change, and conflicts between work and family or work and leisure. By reexamining existing personnel policies and attempting to expand employees' work options, companies can do much to alleviate these sources of stress and thus enhance organizational health and profitability. (MN)

WBGH WORKSITE WELLNESS SERIES

ED286012

# DEVELOPING HEALTHY COMPANIES THROUGH HUMAN RESOURCES MANAGEMENT

Prepared by

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U.S. DEPARTMENT OF EDUCATION
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Office of Disease Prevention and Health Promotion
Department of Health and Human Services

ED286012

WBGH Worksite Wellness Series

# DEVELOPING HEALTHY COMPANIES THROUGH HUMAN RESOURCES MANAGEMENT

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# DEVELOPING HEALTHY COMPANIES THROUGH HUMAN RESOURCES MANAGEMENT

## INTRODUCTION

The idea of the "healthy corporation" is not new; rather it represents a synthesis of fifty years of research and programs on health and human resources at the workplace. This concept links individual health with organizational profitability, and illustrates all the potential that lies in connecting these two important goals. The "healthy corporation" attaches dollar figures to "people" and applies the concept of health and human capital to a company's most valued resources--its employees. By emphasizing human capital as a strategic resource, we are now able to see how knowledge, creativity, and commitment directly relate to health and how they, together, exert an impact on work performance and the bottom line. The "healthy corporation" sets the stage for this to occur.

Historically, companies have initiated a myriad of efforts to maximize the health and performance of their workforce. By offering health benefits and by adopting certain types of human resource policies, companies have tried to keep their employees healthy and productive on the job. Most business people would argue that healthier people produce better results. But as we examine the universe of American companies, it is clear that some organizations make much better health and human capital investments than others.

The healthy corporation differs dramatically from its unhealthy counterpart. The most profound difference is that the former promotes health and productivity simultaneously. In these companies, "peak performers" and "stress-resistant" employees are viewed as corporate assets, and the company does all it can to

maximize their physical and mental health. Health care benefits and wellness programs are designed to promote employee health. Work conditions and management policies are then created to support health and productivity. In healthy companies, health and productivity are two goals considered to be inseparable.

In contrast, unhealthy companies ignore the connection between health and productivity altogether, and in fact, often contribute to the stress and disease of their employees. The result is generally an increase in unnecessary health and human resource costs as well as a reduction in profits.

In today's world, no one company can be considered a totally "healthy corporation." Yet, there are numerous examples in many of the more high-performing companies where specific programs and policies are viewed as both healthy and productive. These enlightened companies, with their innovative policies and programs, have provided us with a first glance at the future of the "healthy corporation."

## CURRENT STATE OF CORPORATE HEALTH

There are four major health and productivity divisions inside a company: health benefits; occupational safety and health; prevention and wellness; and human resource development. Each plays a separate but important role in promoting health and productivity inside the organization.

### Health Benefits

Since the 1930s, employers' responsibility for the health of their employees and their families has increased markedly through the provisions of health care benefits.

- Health care benefits have expanded to include major medical and hospitalization services, prescription drugs, dental care, are for drug abuse and alcoholism, vision care, pediatric services, home health services, and more recently hospice care, and the use of birthing centers.[1]
- Many companies have expanded their coverage to dependents.
- Most large employers pick up the cost of health insurance for retirees to supplement Medicare coverage. The cost of this coverage is growing rapidly as the population ages, and Medicare benefits erode.[2]
- There has been a growth of health-related programs such as workers' compensation and short- and long-term disability insurance programs.[3]

In recent years, the threat of escalating health care costs has forced many employers to find new opportunities for managing their health care benefits more efficiently. Today employers are more aggressive in arranging for therapeutically-efficient and cost-effective care. By offering this type of cost-effective

quality care, companies attempt to maximize the health and productivity of their employees by offering them access to a sophisticated health care system.

## Occupational Safety and Health

The first occupational safety programs developed as early as the 1900s, often for reasons other than health. Smoking policies, safety regulations, and recreation programs were implemented for morale and product quality reasons, not to benefit workers' health.

By the 1940s, companies and unions began focusing on the work environment as a major source of occupational health problems. During this time, the country was witnessing the peak of its "industrial society" where industries such as natural resources and manufacturing dominated the marketplace. Many of the products involved the handling of physical, chemical, and biological substances. Attention was paid to occupational hazards associated with these substances, such as chemical carcinogens, asbestos, and exposure to coal and cotton dust. Various programs were then designed to reduce the incidence of injuries, illnesses and deaths attributable to these causes. This movement received strong federal support in the late 1960s with the passage of the Coal Mine Health and Safety Act of 1969 and the Occupational Safety and Health Act of 1970.

Today the occupational health field is stronger than ever, bringing together the fields of toxicology, industrial hygiene, environmental epidemiology, and occupational medicine. The threat of worksite and toxic chemicals still looms high in many workplaces, particularly new chemicals for which the effects of exposure are not immediately obvious. Many of these agents are coming from the emerging electronics and biotechnology industries.

## Prevention and Wellness

The changing nature of illness from acute infectious disease to life-style-related disorders, and the growing connection between employee health and productivity were primarily responsible for the growth of worksite wellness and prevention.

The first of these programs began as early as the 1940s, either focusing on a single illness such as alcoholism, or on a single sector in the workforce, such as executive physicals. By the late 1970s, the field became popularized as "worksite wellness," and began expanding in many directions involving the expertise of corporate medical directors, employee assistance counselors, and health education specialists. The movement was guided by the following principles:

- It was based on growing scientific evidence about prevention. The etiology of disease is related to unhealthy lifestyles--over 50 percent of disease is caused by lifestyle risk factors such as poor diet, smoking, sedentariness, stress, and obesity.[4]
- The focus is on general health and disease, not just health that is directly work-related.
- The focus is on the individual, rather than the environment, as a major source of health problems and as the target of intervention.

Specific program examples include health risk assessments, drug and alcohol awareness, smoking cessation, physical fitness, and stress management.

Today worksite wellness is almost commonplace, as several national surveys document the growth in the number of programs and in the variation of program configuration and modes of operation. Companies report that these programs serve as employee benefits, employee relations tools, productivity

enhancers, cost containment strategies, and human resource programs.[5,6,7] Unions are increasingly receptive: and examples of success are more frequent and accessible. There also is a growing science base supporting the cost-effectiveness of wellness and prevention at the workplace.[8]

## Human Resource Development

In a short 25 years, the status of "personnel" officers has changed from merely an employment manager to a top executive with expertise in "human capital" managing an integrated human resource development system.[9] This transition in status and role occurred independent of the health function inside companies.

Today, human resource management is a totally integrated system involving the planning, selecting, developing and evaluating of employees. The human resource development professional oversees a number of interdependent functions: union and labor relations; compensation and benefits; wage and salary administration; performance planning and arbitration; training and development; management development; organizational development; personnel and career planning; selection and recruitment.

## Organizational Health: A New Approach

The four areas outlined above, (health benefits, occupational safety and health, prevention, and wellness, human resource development) have contributed significantly to enhancing worker health. They have done this in many ways. First, employees, dependents and retirees now have immediate access to a sophisticated health care system, primarily through employer-subsidized health care benefits. Second, an expanding occupational safety and health field has attempted, with varying degrees of success, to minimize toxic exposures in the workplace, many considered primary sources of occupational health problems.

Third, an increasing number of companies are initiating wellness and health promotion activities in the belief that workers engaging in healthy lifestyles can reduce health care costs. Finally, management and human resource programs are slowly being examined from a health perspective. Unfortunately, most policies in this area have focused almost exclusively on performance and productivity, not on health.

Despite these accomplishments, each of the four divisions has been limited in its approach to health at the workplace. Each focuses on only one aspect of the overall problem, and in most cases, there is minimal communication across departments. Collectively, however, they have formed the basis for a new, more integrated organizational health field.

The healthy corporation offers a solution. By retaining the strengths of each of these movements, by compensating for their limitations, and by offering a holistic view of health, the "healthy corporation" provides an integrated approach to organizations. From this perspective, health and human resource management are viewed as complementary, with departments working in concert toward a goal of health and productivity. Companies can then benefit from sharing insights and resources across divisions and can avoid duplication of contradictory programs. The "healthy corporation" becomes a guiding principle for organizational health policy.

## KEY CONSIDERATIONS OF THE "HEALTHY CORPORATION"

The "healthy corporation" is a comprehensive attitude about organizational life and about the lives that worksetting influences. It is a goal and a concept. The goal is to maximize individual health and organizational profitability.

### Concept

The "healthy corporation" takes an integrated view of health and the organization.

INDIVIDUAL CORPORATION

FAMILY

Four key considerations are critical:

- An employee's impact on his/her own health
- The impact of the work environment on employee health
- The impact of employee health on organizational profitability
- The impact of the larger environment (family, peers, leisure) on employee health and organizational profits.

### Employee's Impact on Health

The changing nature of illness from acute, infectious disease to chronic, degenerative illness leads to the conclusion that the major health problems causing premature morbidity and death are diseases that can be prevented through lifestyle changes. One in ten employees suffer from two or more "controllable lifestyle

risk factors." Each of these "factors" is strongly related to increased risk of illness, and increased costs. In a typical organization,[10] for example,

- 29 percent of employees smoke cigarettes
- 15-25 percent are hypertensive
- 20-30 percent are overweight
- 80 percent underexercise
- 10-20 percent have mental health/substance abuse
- 30 percent are prone to low-back injury
- 35-45 percent burn out on the job.

Chronic "unhealthy" stress is a major risk factor for illness as well. Yet, stress is a more ubiquitous concept than the other risk factors. Stress can be either positive or negative. Therefore, it is important to differentiate between stress that people perceive as challenging and stimulating, and stress that is debilitating and a threat to health and well-being.

Chronic stress is unique for a variety of reasons.

- Stress can exacerbate all other lifestyle risk factors.
- Stress is associated with a range of physical and mental disorders. Indeed, most standard medical textbooks attribute anywhere from 50 to 80 percent of all disease to psychosomatic stress-related origins.[11]
- Physical disorders in which stress has been implicated as risk factors includes colds, minor infections, bronchial asthma, hypertension, immune disease, peptic ulcer, hyperthyroidism, cardio-vascular illness, cancer and female reproductive dysfunction.[12]
- Impressive evidence also suggests that excessive stress is a risk factor for the precipitation of mental disorders such as depression, anxiety, schizophrenia, sleep disturbances, alcoholism, and drug abuse.[13]

- o Various physical, psychological, and environmental conditions are capable of producing stress.[14]
- o Stress-related disorders may be acute and transient, or persistent and enduring.[15]
- o The outcomes of prolonged excessive stress may be physiological, psychological, behavioral, organizational, and financial.[16]

## Impact of Work Environment on Health

The environment in which one works is an important causal factor in the development of physical and mental disorders. The National Institute for Occupational Safety and Health (NIOSH) compiled a list of the leading work-related diseases and injuries in the United States.[17] NIOSH used three measurements in compiling this list: how often the diseases or injuries occur, how severe they are, and how amenable the causes are to change for the better.

### 10 Leading Work-Related Diseases and Injuries[17]

1. Occupational lung diseases--asbestosis, byssinosis, silicosis, lung cancer, occupational asthma.
2. Musculoskeletal injuries - disorders of the back, trunk, upper extremity, neck, lower extremity; traumatically induced injuries.
3. Occupational cancers (other than lung)--leukemia, mesothelioma, cancers of the nose, liver, and bladder.
4. Amputations, fractures, eye loss, lacerations.
5. Cardiovascular diseases--hypertension, coronary artery disease, acute myocardial infarction.
6. Disorders of reproduction--infertility, spontaneous abortion, birth defects.
7. Neurotoxic disorders--peripheral neuropathy, toxic encephalitis, psychoses, extreme personality changes.
8. Noise-induced loss of hearing .

9. Dermatologic (Skin) conditions--dermatoses, burns, contusions.
10. Psychologic disorders--neuroses, personality disorders, alcoholism, drug dependency.

The connection between work conditions and health also can be examined by looking at the relationship between work conditions, health breakdowns, and productivity. For example, there is now ten years of government-sponsored research documenting the direct impact of organizational policies and procedures on stress and health problems of workers.

Unhealthy, organizational stress can result from:

-- Too much or too little responsibility
-- Not being able to utilize personal talents or abilities effectively or to full potential
-- Lack of control or authority over job decisions
-- Crowding or social isolation
-- Poor supervision
-- Tense work relationships
-- Impaired communications and lack of opportunity to voice complaints
-- Confusion about one's job or role in the organization
-- Inadequate rewards and promotions
-- Constant change, deadening repetition, or job insecurity
-- Unpleasant environmental conditions such as smoking, noise, air pollution, or commuting difficulties
-- Perceived threat of deadly toxic exposures

Burnout is a condition caused by chronic organizational stress. Experts believe that as many as 35 to 45 percent of workers suffer from this condition.[18] Many of the above work situations have been directly linked to burnout.

## Impact of Employee Health on Organizational Profitability

Human resource specialists and corporate health professionals are able to measure the impact of unhealthy stress and health breakdowns on business costs in a number of ways. The following three personnel examples identify some of these costs.

EXAMPLES

John Doe, a computer specialist for a large software company, has had a long-standing recreational drug and alcohol problem. He smokes marijuana several times a week, sometimes before work, and drinks numerous beers at home in the evening. At the workplace, this substance abuse problem is felt in several ways. John experiences concentration problems and mental blocks that cause increased errors and work slowdown. He needs to take more breaks than his fellow employees and is frequently late in the morning. A chronic respiratory ailment has led to increasing absenteeism and ongoing visits to his physician.

Jane Smith, a reservations manager for a medium-size hotel chain, has always had difficulty managing stress. She smokes cigarettes and has ongoing difficulties sleeping. Her new manager is unsupportive and unpredictable. The organization has felt the consequences. In recent months, her morale has plummeted, relations with co-workers are tense, and there have been several reports from customers that her attitude is curt and hostile. She spends a great deal of time complaining to co-workers about her new manager. Her chronic headaches have led her to three neurologists for consultation.

Bill Johns, who works on the loading dock for a small manufacturer, recently left his wife after years of a bad marriage. Subsequently, Bill has become preoccupied at work. He has missed deadlines, loaded trucks with wrong materials, and generally decreased his overall productivity. One day Bill tripped on some oil on the dock while carrying too many boxes.

Angry at the entire situation, he filed a worker's compensation claim and received thousands in dollars in disability pay.

As companies become more sophisticated in health and human resource cost accounting, the link between health and bottom line profits will become clear. Following is a list of human resource factors, each directly affected by a worker's physical and emotional health.

- o Job dissatisfaction
- o Poor morale
- o Lateness
- o Early departures
- o Decreased quality and quantity of output
- o Work slowdown
- o Group conflict
- o Tense work relations
- o Grievances
- o Accidents.
- o Time lost due to medical visits
- o Excitability
- o Mental blocks
- o Decreased motivation
- o Lack of commitment to product quality
- o Extended lunches
- o Increased errors
- o Missed deadlines
- o Poor quality of decision making
- o Strikes
- o Increased transfer and demotion costs
- o Disciplinary proceedings
- o EEO complaints
- o Tense customer relations
- o Unscheduled machine downtime due to employee tampering

Corporate financial analysts measure the effects of stress and health breakdowns in more economic terms, for instance:

- o Absenteeism
- o Turnover
- o Reduced productivity
- o Excessive health care cost
- o Short and long-term disability

- o Work compensation premiums
- o Accidents
- o Early pension payments.

**Impact of Larger Environment on Employee Health and Organizational Profits**

There is a growing belief that organizational life is connected to other aspects of people's lives, including family, peer groups, leisure activities and education. One reason for this shift is that Americans are redefining the work-nonwork relationship and are trying new ways of balancing work and career growth, leisure and family life. The exaggeration of one area at the expense of another can create an imbalance in one's life--and act as a health threat, resulting in decreased productivity.

As a result of these changes, general health and occupational health are becoming blurred. Today, companies must see the connection between stress at work and stress at home. Both spheres in people's lives are affected.

## CORPORATE CULTURE AND HEALTH

There are many corporate strategies that can be used to improve employee health and productivity. Several of these strategies have already been discussed (e.g. offering quality, cost-efficient health care benefits; reducing occupational exposures at the worksite; providing wellness and prevention programs). This paper focuses on one area that has received the least amount of attention--the link between organizational climate and health. Attention to work climate is critical to the "healthy corporation." By creating an atmosphere that promotes health and productivity, companies can support their other "health-related activities" such as health benefits and wellness programs through health-promoting personnel programs and policies. Without this supporting climate, organizations can potentially sabotage their investments in human capital by creating unhealthy workplaces that ultimately cause unnecessary health breakdowns among employees.

There are seven factors inside organizations, not commonly thought of as being related to health, that place workers at potential risk for health breakdowns. These include:

- o Stressful Work Conditions
- o Lack of Control/Participation
- o Tense Work Relationships
- o Lack of Career Progression
- o Unclear Work Roles
- o Poorly Managed Change
- o Family and Leisure Conflicts

Every work group, department, and division inside a company can be evaluated according to these seven factors.

This paper will examine each of these factors separately, along with strategies to combat the problem. The corporate strategies cited for dealing with these unhealthy situations were obtained through interviews with key corporate personnel, reviews of previously published program descriptions, and corporate communications.

Most of the corporate approaches presented can have an immediate positive impact on health and productivity. Some, however, may take time to achieve their full impact. A few employees may even experience more stress as a result of the changes. It is, therefore, management's responsibility to determine what is stressful, for whom, and under what conditions.

## STRESSFUL WORK CONDITIONS

Work-related health dangers were thought to be limited to blue collar workers in traditional manufacturing settings. Yet, this focus on blue-collar work has diverted our attention away from the stressful nature of work conditions generally, and the growing dangers associated with white-collar jobs.

For example, the content and process of work, where physical safety is not an issue, often goes unnoticed as a source of health risk. One familiar work situation occurs when employees are asked to perform too much work without adequate resources, and little attention is paid to the health effects. Examples of work overload include excessively paced machines, "speed-ups," and unreasonable physical demands such as unrealistic deadlines and time pressures. The secretary bombarded with excessive job demands or the factory employee driven by uncontrollable automation work under these conditions. Understaffing, and excessive control of work by automated routines or company rules can exacerbate the problem.

At the other end of the continuum, many jobs underutilize human knowledge, skills, and initiative. Monotonous work with little responsibility, too narrow job content, lack of variation, and low demands on creativity exemplify this type of work. These jobs are often viewed by workers as repetitious and boring. Long periods of sedentary confinement can lead to alienation, stress, and a lack of commitment to work.

Crowded working conditions and lack of privacy can also have deleterious effects on employee health. Examples of workers in this category include coal miners, employees who must wear confining body apparatus, and clerical staff working in open, densely populated offices. Workers who are isolated, such as security guards, can also lead to feelings of alienation, loneliness, and stress.

Perhaps the greatest occupational hazard of all is the modern white-collar office building because of its complexity, its latent health effects, potential cost, and the number of employees affected. Some commonly cited office risk factors include inappropriate lighting, poor air quality, extreme temperatures, noise pollution, and poorly designed office equipment.

Various research links stressful work conditions to health and productivity outcomes. Each of the areas is reviewed below:

Effects of Negative Physical Environment

- Every year one out of nine workers in private industry will suffer an occupational injury, totalling over five million injuries.[19] Many of these injuries are caused by the negative physical environment.
- Approximately 21 million American workers are exposed to substances regulated by the Occupational Safety and Health Administration.[20]

Work Overload/Too Much Work With Inadequate Resources

- In a recent NIOSH study examining how the most stressful occupations affect employee health and disease, the one similarity between almost all of the jobs was the fast pace of work with little chance of relief.[22]
- Research has shown that work overload is associated with increased health symptoms and breakdowns, hypertension, heart attacks, job dissatisfaction, anxiety, depression, drinking, absenteeism, decreased self esteem, and numerous family difficulties. The greatest physical and mental health difficulties occur when quantitative work overload and skill underutilization are combined.[23,24,25]

- A classic study showed marked increases in the blood cholesterol levels of tax accountants as the April 15 filing deadline approached. After the deadline, their cholesterol levels gradually returned to normal.[26]

Repetitious/Monotonous Work

- There is extensive literature showing that repetition, monotony, and the lack of task variability is related to poor health outcomes ranging from hypertension and cardiovascular risk to excessive drinking and depression.[27]
- According to a study of 2,000 people at the University of Michigan's Institute for Occupational Safety, those who reported being bored at work felt that their abilities were not being used and their job did not promise as much complexity and variety as they wanted. These conditions frustrated people's desire to perform well, causing unnecessary stress that was harmful to productivity and health.[28]

Shift Work

- Studies show that shiftwork upsets the circadian rhythms leading to fatigue, increased accidents, less-than-optimum job performance, worker dissatisfaction, and increased health problems (sleep, mood, and digestive disturbance; higher incidence of ulcers, higher susceptibility to chemical agents).[29,30]
- Shiftwork research also indicates that combinations of proper chronohygiene with appropriate shift schedules minimize physiological and sociological problems. Long-term benefits of these programs include higher morale, fewer accidents, improved health, and higher productivity.[31]

Noise

Studies demonstrate that noise pollution is a major health risk and an important deterrent to office and manufacturing productivity.

- o More than 20 million workers are exposed to "hazardous" noise every year.[32]
- o It has been estimated that almost three-fourths of the workers who spend 20 years on their jobs under current allowable noise levels will experience hearing loss.[33]
- o Studies in noisy industries have shown that cases of ulcers were up to five times as numerous as would be expected under normal conditions

Ventilation

The incidence of health problems related to office air has risen dramatically with the widespread adoption of energy-efficient building ventilation systems and tightly sealed office buildings. Dangerous build-ups of toxic substances and bacteria have been linked to numerous symptoms and illnesses.[35]

- o Office machinery and equipment give off hazardous fumes that often are circulated in small windowless rooms. Many office workers are plagued by headaches, fatigue, and other problems that are signals of improper ventilation.[36]
- o The General Accounting Office reports that higher concentrations of air pollutants have been found in indoor as compared to outdoor environments.[37]
- o More than 770,000 American workers employed in office and manufacturing settings are exposed to ionizing radiation on their jobs (x-ray machines, radioactive material, lazer beams, electronic equipment).[38]

## Video Display Terminals (VDTs)

- Musculoskeletal disorders have been one of the major categories of self-reported complaints by VDT workers, a high percentage of whom report pains, stiffness, cramps, and numbness in the back, neck, shoulder, arms, and hands. Longer periods of time spent at VDTs produce a greater number of symptoms.[39,40]
- In a cross-sectional study of clerical workers in the communications industry, those who worked at the VDT were at about a two-fold greater risk for developing angina pectoris, making this the first study to demonstrate a relationship between automated office work and a valid precursor of cardiovascular disease.[41]
- Fifteen years of research has shown that VDT workers report a high prevalence of visual strain. Studies show between 47 and 91 percent of all operators experiencing strain. VDT work is associated with an increase in visual symptoms across most occupations, but especially in those with heavy visual demands.[42]

## Stress on the Job

A study by scientists of the National Institute of Occupational Safety and Health (NIOSH) analyzed Tennessee hospital and death records to determine which jobs produced high rates of stress-related illnesses, including heart attacks, ulcers, arthritis, and mental disorders.[43] Of 130 jobs studied, the twelve highest were:

**12 Jobs With Most Stress**

1. Laborer
2. Secretary
3. Inspector

4. Clinical lab technician
5. Office manager
6. Foreman
7. Manager/administrator
8. Waitress/waiter
9. Machine operator
10. Farm owner
11. Miner
12. Painter

- Studies of employee burnout indicate that as many as 45 percent of workers experience the condition at any one time, characterized by insomnia, physical complaints, a depressed emotional state, and increased reliance on alcohol and drugs. This condition afflicts all occupations.[44]

## Corporate Approaches

The following are examples of some corporate strategies designed to protect workers against the effects of unhealthy work conditions.

- Job Redesign
- Redesign of Physical Setting
- Improved Safety and Hygiene
- Consider Stress Management in Defining Work Tasks

### Job Redesign

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In 1980, Northwestern Mutual Life conducted a study of reporting relationships and work flow in its underwriting and policyowner services departments. It concluded that these operations were too highly functionalized and did not maximize the company's large investment in technology. Analysts were handling only small parts of the overall underwriting and service functions,

without sufficient understanding of the overall process or the role each function played in the process. With the benefit of the study and full support from top management, the company instituted major changes in these departments. Basically, Northwestern changed from highly functional operations to "one-stop service", provided through analysts who could complete all or most of the activities related to a particular policy with a high degrees of autonomy and accountability for the final result.

- Task forces were created to look at each job, each step in the flow of work, and the underlying data processing systems.

- Believing that it was critical to involve people when making changes, the company actively sought input from personnel who performed the day-to-day work. Each task force had six members, ranging from department heads to clerical analysts.

As a result of these discussions, accountability was driven downward. Operational functions were regionalized (East, South, Central, and West), and each region had final and complete responsibility for underwriting decisions, issuing policies, and serving the needs of existing policyowners. Within each region, "core jobs" were identified with each function. One of these departments had sixty different job descriptions. These were boiled down to six generic jobs. As people learned new functions and developed new skills, their job responsibilities were broadened. The company stepped up training, spending a total of 35,000 training hours in 1982 alone.

- To relieve potential tension and stress, Northwestern made a written commitment to staff making it clear that no one would lose his or her job because of the reorganization. Union leadership was invited to participate in early discussions and training sessions.

- Several important results emerged from the reorganization. Work flow was streamlined, complaints were reduced, and the company reduced the time for processing new applications for insurance. Productivity in creased. Morale and job satisfaction improved as 25 percent of those involved in the reorganization received promotions due to broadened capacities. The company did not have a single union grievance.

## Redesign of Physical Setting

**ROLM Corporation**, Santa Clara, CA
Ken Rowe, Manager, Information and Editorial Programs
(408) 986-5674

Rolm believes strongly in developing a healthy, relaxing business setting.

- Physical grounds at Rolm's corporate headquarters in Santa Clara, CA, are pleasant and comfortable. Streams, bridges, lawns and flowers enhance the physical attractiveness. Curving paths rather than straight walkways make movement between work stations more enjoyable and less stressful.

- Buildings are constructed in a "humanistic" fashion: Wood as opposed to concrete; human scale; and single story. All employees work near windows. Efforts toward an egalitarian workplace are evidenced by few, if any, executive perks in the parking lots or cafeteria.

- The cafeteria is designed to make dining comfortable and non-stressful. Various "microenvironments" are available to employees with different needs (e.g. open booths, elevated areas, large and small tables, secluded areas, counters).

## Improved Safety and Hygiene Programs

**DuPont**, Wilmington, DE
T. H. Todd, Director, Health and Environmental Affairs
(302) 774-3607

Dupont has one of the most extensive worksite safety programs, evidenced by a firm policy and principles and backed up by a solid program and extensive company resources. The overall program is founded on "ten principles of safety."

1. All injuries and occupational illnesses can be prevented.
2. Management is directly responsible for preventing injuries and illnesses.
3. Safety is a condition of employment.
4. Training is an essential element for safe work places.
5. Management must audit safety performance in the workplace.
6. All deficiencies must be corrected promptly, either through modifying facilities, changing procedures, bettering employee training, or disciplining constructively.
7. It is essential to investigate all unsafe practices and incidents with injury potential.

8 Safety off-the-job is just as important as safety on-the-job.
9 It is good business to prevent illness and injury.
10 People are the most critical element in the success of a safety and health program.

DuPont's position on safety is backed up by a written policy that states that the company will not make, handle, use, sell, transport or dispose of a product unless it can do so safely and in an environmentally sound manner. At DuPont, the chairman of the board is the chief safety officer. He and other senior executives set the safety standards and annual performance objectives for the entire company.

At worksites worldwide, the individual manager is personally responsible for the safety and health of each of his/her subordinates. It is recommended that the managers:

- Establish a safety committee and lead and participate in all safety meetings.
- Put safety at the top of the staff meeting agenda.
- Review serious incidents that occur within the offices, as well as incidents that occur in other parts of the company.
- Audit for unsafe conditions and take swift corrective action.
- Make safety an integral part of employees' yearly performance review.
- Commit resources to train employees properly and safely.
- Take prompt disciplinary action to correct deficiencies.
- Invest capital resources to protect people.
- Pay overtime to correct a safety problem.

To support each of these activities, there are four components of DuPont's occupational health program:

- Toxicology - Conducts long and short term studies on chemical substances to determine toxic properties, ranging from skin irritation to carcinogenicity.
- Industrial Hygiene - Samples and measures the potential risk in the work environment, for example, noise, radiation, and contaminants in the air and water.
- Occupational Medicine - Consists of routine and specialized health surveillance and emergency medical care.
- Epidemiology - Maintains computerized data files for surveillance, including mortality of employees and pensioners, employees' disabilities from illness or injury, and a cancer registry to study cancer incidence and mortality.

## Consider Stress Management in Defining Work Tasks

**General Chronobionics**, Hinsdale IL and
**Argonne National Laboratories**, Argonne, IL
Charles Ehret, Senior Scientist
(312) 977-3862

At General Chronobionics and at Argonne National Laboratory, the health and performance effects of shiftwork are studied extensively. Management has used this research to implement a series of programs that combine proper chronohygiene (planned rescheduling of meals and activities, such as diet, meal times, and daily rhythm of rest and activity) with improved shift-rotation (schedules or "ROTAs" that rotate in the direction of circadian-phase delay and never more often than by one shift per week) to minimize the physiological and sociological problems associated with shiftwork. Experts at General Chronobionics and at Argonne believe that improperly manned shiftwork produces health problems and work performance deficits. Properly applied chronohygiene and properly designed "ROTAs" can help workers adjust to these new shifts. The long-term benefits to both employers and employees include higher morale, fewer accidents, improved health and higher productivity.

## LACK OF CONTROL/PARTICIPATION

Workers need to feel some sense of control over their own destinies at home, at work, and in their personal lives. Without this control at work, some people become alienated or angry, and lose their motivation and desire to innovate. Others in the workplace acknowledge their lack of control, but develop a variety of physical and emotional symptoms. In both cases employees feel stressed and disenchanted with their work, placing them at risk for a variety of health problems. Areas of control important to most people include control over workpace and work methods, process decisions, contact with other people, scheduling, and influence over the planning and design of work. Workers also like to control their potential for failures, disapproval, and future stressors, and desire input into group tasks and decisions. Perhaps the greatest stress of all stems from the unpredictability of work; for example, conditions over which employees have little control such as inconsistent company policies and unpredictable managers.

In recent years, the growth in office automation has expanded the list of jobs that offer employees very little control over work. Machine pacing can both increase the workload and decrease control.

### Research Findings

Numerous studies show that lack of control and limited participation in decision-making place workers at risk for a variety of physical and psychological disorders. These work conditions have been associated with increases in somatic symptoms, alcoholism, cardiovascular disease, anxiety, and depression. They also are linked to productivity deficits such as increases in absenteeism, turnover, and decreases in job satisfaction, use of skills, commitment, and innovation.[45,46]

Laboratory and field studies also show that individuals who "predict, understand or control" events in their organizations experience less organizational stress and are less adversely affected by that stress.[47]

- Researchers studying workplace stressors found that among a national, representative sample of over 1,400 workers, the most significant and consistent predictor of stress was the lack of opportunity of workers to participate in decision making on the job. As opportunities for participation in workplace decisions increased, so did productivity and performance levels.[48]
- In a six-year prospective analysis, men with jobs characterized by a heavy workload and limited job control were found to have 1.4 times the normal risk of death from cardiovascular disease.[49]
- Women who described their jobs as having a heavy workload with limited job control had a three-fold greater risk of developing coronary heart disease (CHD) than did women reporting a heavy workload but having control over their work. Men did not exhibit the same relationship. At greatest risk were clerical women, who had a 420 percent greater chance of developing CHD. These associations persisted after controlling for the traditional risk factors for CHD.[50]
- Personality research indicates that there are certain types of "stress-resistant employees" who pride themselves in taking control over their work. One study identified these employees by comparing two groups of highly stressed executives. Both groups had similar jobs in the same company, but one group had the most illnesses and health claims, and one had the least. The healthier group was characterized as "stress-resistant." It was found that these stress-resistant executives differed from their less healthy coworkers in three qualities:[52]

-- Openness to challenge,
-- Involvement in work, and
-- Sense of personal control over work.

## Corporate Approaches

Following are examples of some corporate strategies designed to protect workers against stress and health problems associated with lack of control in the workplace.

- o Upward Communication Programs
- o Participation/Self Management Opportunities
- o Control Over Workpace, Process, Decisions, and Scheduling
- o Opportunities for Intrepreneurship
- o Organization-Wide Reward/Compensation Programs

### Upward Communication Programs

**Dana Corporation**, Toledo, OH
Don Decker, Director, Public Relations
(419) 535-4601

Based on the belief that people are its most important asset, Dana is dedicated to facilitating upward communications and minimizing the feeling of powerlessness inside the organization. Principles such as "helping people grow, encouraging entrepreneurship, pushing responsibility down, involving everyone, communicating fully, and breaking down organizational barriers" are examples of this commitment. The policy is based on a two-way model of communication. It is the responsibility of managers and employees to inform each other about activities at Dana. Several programs exemplify these principles.

- o "Ask Me" is a program that gives employees direct access to top management. Posters of the chairman and prestamped notepads are available in all locations. Employees are asked to communicate directly about any issue with the chairman. The Chairman receives 15 letters per week and responds to each one.
- o The Chairman and President also travel thirty days per year to all worksites to inform workers about the company's status, and conversely, to receive feedback and answer questions of employees.

## Participative/Self Management Opportunities

**W. L. Gore and Company**, Newark, DE
Diane Ellis, Personnel Manager
(302) 738-4880

Based on a strong emphasis of self responsibility and self management, W.L. Gore and Company has devised a unique "System of Unmanagement" whereby "associates" (not employees) are given freedom and opportunity to develop on the job. At Gore, associates are encouraged to grow in knowledge, skill, and scope of responsibility, and are asked to make "voluntary commitments" to the organization. In exchange for these commitments, "sponsors" (not bosses) expose "associates" to a full range of opportunities. There are no formal titles, hierarchies, conventional structures, nor any fixed, assigned authority. Commitment, fairness and freedom are the guiding principles in this corporate culture. Training and supervision is carried out through an informal mentoring process called the "Sponsorship Program." Gore associates learn about the principles of self management and commitment through the mentoring/sponsorship process, and through more formal ongoing discussion groups. Each "associate" participates with three different types of sponsors.

- Starting Sponsor is much like a big brother/sister. His/her primary responsibility is to introduce new employees, and help them grow into independent, responsible "associates."

- Advocate Sponsor plays the role of "advocate" in all discussions inside the organization.

- Compensation Sponsor, along with other key personnel, determines an associate's contribution to the success of the enterprise, and decides on salary, compensation, and personnel requests.

## Control Over Workpace, Decisions, and Scheduling

**Honeywell**, Minneapolis, MN
Jim Widfelt, Associate Director, Quality Management Systems
(612)931-7593

In 1974, Honeywell began a unique participative management program with the goal of improving organizational productivity and the quality of work life. The overall objective was to help employees become more self-determining at work, improve quality, and reduce the tension associated with authoritarian management.

The program is based on the assumption that people want to perform well, and what they need most are opportunities. It asks employees two basic questions:

- What is keeping you from being more productive?
- How can we make this a better place to work?

Today, there are well over 2,000 "Quality Management" systems at Honeywell, 60 percent in factory settings. Groups may meet weekly or once a month. In their discussions they may focus on a wide variety of job-related topics, such as work flow, scheduling, quality improvement, new products, and organizational climate issues. Honeywell reports that its employees are more satisfied, less stressed, and more productive. Absenteeism and accidents are down.

## Opportunities for Intrapreneurship

**3M Company**, St. Paul, MN
Christopher Wheeler, Executive Vice President, Human Resources
(612) 733-0592

3M's long-standing commitment to innovation and in-house entrepreneurship is exemplified by the company's philosophy about nurturing creativity, "Thou shalt not kill a new product idea, just deflect it." To stimulate innovations, 3M offers a variety of programs, each designed to give employees opportunities to grow, and create on the job.

- Stimulate Boundary Crossing--3M minimizes organizational barriers that impede innovation by fostering open communication among their technical, marketing, manufacturing and human resource divisions. For example, in Austin, Texas, research and marketing people are placed in close physical proximity to encourage collaborative activities.

- Empower Employees--3M creates opportunities for employees to innovate entrepreneurally.
  - -- "Genesis," is a program for scientists and technical personnel where employees have the opportunity to come forward with innovative areas of research, and receive funds to operate independently.
  - -- "Venture Career Path" is a new program for in-house entrepreneurs providing them staff and sufficient funding to take an embryonic idea all the way to market.
  - -- "Optimize Operations" is a Quality of Worklife/Quality Circle Program located in many 3M manufacturing plants.

- Rewards and Recognition. Through action teams, 3M strives to find new ways of rewarding and recognizing talent inside the corporation. 3M maintains a promotion from within policy and offers dual career paths for scientists in research labs. 3M continues to recognize and financially reward outstanding contributions in the technical area.
- Smallness and Flexibility. 3M calls itself a biological organization. When a new product sells well enough, a new division is born.
  -- Median plant size is 114 people
  -- Only five of the ninety-one U.S. plants have more than 1,000 people.

Organization-Wide Reward/Compensation Programs

Several types of financial reward programs can be initiated to give employees a sense of control over company profits. Examples include:

- Profit sharing
- Equity and bonus distributions
- Stock options
- Scanlon plan
- Cooperative ownership

**Federal Express**, Memphis, TN
Walter Duhaine, Senior Manager, Employee Benefits
(901) 922-5450

Federal Express offers three compensation programs that give employees control over the profits of the company.

- Current Profit Sharing Plan - Based on the financial health of the company, every six months a percentage of profits is distributed to employees in cash. This percentage has ranged from five percent of salary in December, 1983 (average $825/employee) to 2 - 3 percent in 1985.

- Deferred Profit Sharing Plan - Through an Employee Stock Ownership Plan, workers can accrue profit sharing in a deferred financial account.

- Employee Stock Purchase Plan - Employees can purchase stock at a 15 percent discount rate.

**TENSE WORK RELATIONSHIPS**

Employees spend one-third of their time at work making organizational life and company relationships an influential part of their lives.

Relationships at work are one of the strongest determinants of employee health. These relationships can be either health-promoting and protect an employee against illness, or they can be stress-producing and detrimental to one's health.

Healthy companies differ dramatically from unhealthy ones in their treatment of people. In healthy companies, relationships are open, trusting, predictable, flexible, and supportive. These characteristics apply as much to manager-employee relationships as they do to coworker relations and customer services. Through these healthy connections, companies provide their employees with a sense of belonging and social support, factors known to buffer the negative effects of stress and protect workers against health breakdowns.

Relationships in unhealthy companies, in contrast, are viewed as distrustful, unpredictable, and manipulative, and are often characterized by selfish one-up-manship and closed formal communications. This attitude of mistrust can be caused by numerous factors, sometimes the result of arbitrary policies on the part of management, other times by unhealthy competition among peers. In either case, the workplace turns into a pit of suspicion, hostility, and indiffer-ence, and imposes unnecessary stress on all those involved.

Unhealthy management values are one form of organizational stress that affects relationships at work. Many times these values get reflected in a company's policies and procedures. For example, the following attitudes and values help to create work conditions that are stressful, and potentially detrimental to one's health.

- "Excessive stress is a mark of excellence."
- "Positive feedback doesn't work as well as punishment."
- "Let's keep our employees guessing."
- "Employees are too naive to participate."

Another source of organizational stress results from unhealthy, boss-subordinate relations, often characterized by inconsistency, poor leadership, a lack of concern for the welfare of workers, and on-going conflicts with supervisors and subordinates. Bad bosses can make people sick by being unpredictable and setting up win/lose situations, eventually whittling away at employees' self esteem. Subordinates working under these managers burnout quickly and experience a variety of health problems.

Healthy supervisors, in contrast, provide enough information, help, and equipment to get the job done, and give clear responsibilities and enough authority to workers to carry them out satisfactorily. They also possess the ability to gain cooperation, provide constructive feedback, recognize the critical importance of reward and reinforcement, and are capable of identifying employees who are under stress.

Relations with coworkers can be a health risk factor too. For example, on-going contact with "stress carriers," such as those who either instigate, denigrate, or suffocate their fellow employees, can produce stress for all those around them. Healthy peer competition in a supportive team environment, however, can produce the right amount of stress--just enough to stimulate innovation and productivity--without affecting an employee's health.

## Research Findings

Substantial research at the workplace, in the laboratory, and in other settings demonstrates the importance of positive,

supportive relationships as a buffer against the development of stress and disease.

- Industrial/organizational research shows that poor supervision and inadequate work relations are associated with health problems, such as coronary heart disease, hypertension, ulcer disease, alcohol abuse, psychological stress, anxiety and depression, as well as job factors such as poor job performance and turnover.[53] These studies are consistent with other research that finds the absence of positive social ties is a major risk factor for premature mortality, over and above other known lifestyle risk factors.[54]
- Analysis of the Framingham Heart Study data showed that women clerical workers developed coronary heart disease (CHD) at about twice the rate of other women workers and women at home. The workplace factors that predicted the development of CHD among these clerical workers were a nonsupportive boss and low job mobility.[55,56]
- Research indicates that factors in the workplace are responsible for the growing problem of burnout. Various evidence shows that burnout can be work-related:[60]
  - -- Individuals reporting to the same supervisor are likely to experience similar levels of burnout. This suggests that the policies, practices, and style of the immediate supervisor have a direct bearing on the degree of burnout.[60]
  - -- Work units with high levels of burnout have the following profile:[60]
    - o low group cohesiveness;
    - o low supervisory support;
    - o high pressure to produce; and
    - o unclear roles and goals.

## Corporate Approaches

Following are some examples of corporate strategies designed to protect workers against the stressful effects of unhealthy work relationships:

- Healthy Management Philosophies and Incentives
- Positive Organizational Health Norms
- Supervision, Training, Coaching and Mentoring
- Intergroup Problem Solving, Networking, and Team Building
- Open Communication Programs

### Healthy Management Philosophies and Incentives

**Leo Burnett Company**, Inc., Chicago, IL
Evelyn Dietering, Benefits Manager
(312) 565-5959 ext. 2668

At Leo Burnett Company, Inc., mistakes are part of the business and are incorporated into the firm's organizational health policy. As Burnett himself once said, "the pursuit of excellence is an endless curiosity - searching, throwing away, and trying again....a treasure to be nourished and safeguarded...." In his Formula for Failure, "There is no better way to wreck yourself than to seek the security of agreement, by sailing close to the shore, inside the snug harbor of tradition.... You will make mistakes, but nobody makes mistakes on purpose.... When you do make a mistake....you shouldn't let it gnaw at you but should get it out into the open quickly so it can be dealt with; and you'll sleep better too."

Over the years these management philosophies have molded the human resource policies at Burnett.

- Expressing an alternative point of view, taking chances, and making mistakes are part of doing business.
- At Burnett people have a place to talk and be heard.
- There is a belief that vulnerability and stress are inevitable parts of business and management gives full permission to employees to enter counseling.
- There is an emphasis on teamwork rather than individual performance which give people the freedom to admit mistakes in groups.
- There are ongoing opportunities to change career direction.

Positive Organizational Health Norms

**Hewlitt-Packard**, Palo Alto, CA
Art Dauer, Director, Human Resources
(415) 857-1501

Hewlett-Packard's philosophy reflects a concern for the health of the employees as well as the organization.

- Belief in people, freedom
- Respect for individual self esteem
- Recognition, sense of achievement and participation
- Security; permanence; developing people
- Insurance; personal worry protection
- Share benefits and responsibilities; help each other
- Management by objectives (rather than by directive); decentralization
- Informality; first names; open communication
- A chance to learn by making mistakes
- Training and education; counseling
- Performance and enthusiasm

Supervisory Training, Coaching, and Mentoring Program

**Northern Telecom**, Nashville, TN
Jeff Harris, M.D., Director, Health and Safety
(615) 734-4952

Northern Telecom recognizes that "stress management is good management," and has integrated knowledge of individual and organizational stress into its management training program. The program:

- Teaches managers about stress inside and outside the corporation in relation to themselves, their bosses, subordinates, and families.
- Educates managers about how certain techniques are stress optimizing (i.e. effective communication, role clarity, management of change, intrinsic rewards, and project management).
- Offers organizational stress seminars to intact departments as part of departmental team-building.
- Educates managers and employees about effective lifestyle stress management techniques, such as fitness, relaxation techniques, nutrition, social support, etc.

Intergroup Problem Solving, Networking, and Team Building

**Xerox**, Webster, NY
Larry Pace, Manager, Employee Involvement and Organizational Effectiveness
(716) 422-6646

In 1979, Xerox developed a strategy for total employee involvement that projected an evolution from quality circles to full employee participation within ten years. The implementation of this process began in 1980, using the Japanese quality circle concept as a foundation, and developed into a series of problem solving teams throughout the organization. Over time, the groups evolved into what is now known as the "Business Area Work Group" concept.

- The new "work group" is a cross-functional group with a common output. As many as thirty-five groups consisting of fifteen to fifty employees each blanket an area with 100 percent involvement. Employees meet one and one-half hours biweekly for communication and problem-solving sessions. Temporary teams are created for specific functions with targeted in-depth problem-solving tasks to perform. The work-group functions emphasize information sharing, problem identification, and problem solving. Work group participation is required, but task force participation is optional.
- Twenty-four hours of scheduled Quality-of-Worklife training provides the basic skills needed to become a member of a task force. In the work group, employees are able to participate to whatever extent they desire and are provided the skills to do the job effectively. Training is conducted in groups so that team building is emphasized from the outset.
- Results from the work groups have included:
  - -- Elimination of toxic fumes
  - -- Decreased maintenance material costs
  - -- Decreased clerical paperwork
  - -- Self-managing work teams with control over daily job-related decisions
  - -- Improved ventilation and lighting in service-work areas
  - -- Elimination of unnecessary overhead and reduction of downtime for high volume production machines

Open Communication Programs

**Delta Airlines**, Atlanta, GA
Jackie Pate, Supervisor, Public Relations Administrator
(704) 765-2342

Delta Airlines believes that open, effective communications are essential for establishing the best environment for their people.

- Open-Door Policy--Anyone can go into any office at Delta to voice a problem or complaint.
- Personnel Rep Program--All major operating departments have in-house personnel representatives whose jobs are to facilitate communication. All positions are staffed on a rotating basis, and incumbents are selected from the area they represent.
- Personnel Group Meeting--Every eighteen to twenty-four months, department heads and personnel division representatives host group meetings with their divisions. Current activities of the company along with future plans are discussed. There also is a question and answer period where all local managers are excused, placing employees in direct contact with their department heads. Response and follow-up are an integral part of these sessions. After each meeting, a summary of the questions is circulated back to the particular station, and a copy is circulated to the division head and chief executive officer.

**LACK OF CAREER PROGRESSION**

In today's workplace, employees are moving away from wanting only a nine-to-five job, and are now demanding that their corporations provide career development and personal growth opportunities, such as job advancement, security, and a chance to develop a variety of skills. Employers are seeing the value in career development as well, especially as technologies change and there is increasing need to retain key personnel and compete for talented staff.

Healthy companies are "cultivators of human potential," and where training and development are vehicles for long-term personnel planning. Employees are assessed for their technical and interpersonal skills, and succession plans are created to give workers a sense of where they stand and how they should move throughout the organization. Jobs are flexibly designed to meet personal and career objectives, and employees are encouraged to change those aspects of their jobs that are unsatisfying and unhealthful. Managers are taught to match people to jobs and to reject the "quick fix" approach to stress. They also are sensitive to progression opportunities for women and minorities. Blocked career paths are avoided, whenever possible, and key career transitions, such as promotions, relocations and transfers are designed for health and productivity.

Unhealthy companies, in contrast, pay little attention to developing workers. Their focus is short-term, and the concept of "human capital" is ignored. Workers are insufficiently trained and ill prepared for future markets and jobs within the company. Skills and abilities are poorly monitored, and often underutilized. Some workers are underpromoted, leading to intense feelings of resentment, and stress-related illnesses. Others are overpromoted in unfair ways, creating organizational tension and stress. The norm, however, is career stagnation rather than career growth. The desire for recognition, participation

and stimulating work is seldom seen as relevant to bottom line profits. Little attention is paid to matching workers with jobs or supervisors, often creating tense and unproductive work groups.

Research Findings

- Several studies have examined the relationship between intrinsic rewards(e.g. chance to develop and use skills; interesting work; learning opportunities; belief in what you are doing) and health outcomes. Workers with intrinsically unsatisfying jobs report increased blood pressure, gastrointestinal discomfort, diabetes, cardiovascular risk, and decreased job satisfaction.[61,62,63]
- In jobs where there is little opportunity for promotions, or where promotions are handled unfairly, there is increased antagonism, frustration, depression and indifference.[64]
- In a study of 2000 telephone operators, significant differences were noted between those who were chronically sick and those who were relatively free of illness. The two groups differed in how well matched they were to their jobs.[66]
  - -- Most of the individuals in the chronically sick group had a professional background and a high school or some college education. They tended to describe their duties as confining or boring and generally considered themselves frustrated and stuck in wrong jobs. They were unhappy at home as well as at work.
  - -- The healthy workers came from lower middle class backgrounds and had an elementary school education. As a group, they appeared to be content with their lives and felt their jobs were satisfying and not overly complex or difficult. These attitudes carried over into a happy home life.

## Corporate Approaches

Following are some examples of corporate programs designed to promote health and productivity through various career progression programs:

- Succession Planning/Matching Workers to Jobs, Teams, and Supervisors
- Career Development and Growth Opportunities

### Succession Planning/Matching Workers to Jobs, Teams, and Supervisors

**Exxon**, New York, NY
S. W. Johnson, Public Information Manager
(212) 333-6207

Since 1929, Exxon has felt that identifying and training a successor is a high priority of any manager and the corporation has an extensive corporate-wide system among its fourteen companies to support this commitment. Each year all positions are examined to identify high potential people who might best fill future positions in the company. A systematic program of training and development is then set up to help get them there. Managers throughout the organization review their own position and the positions of the people reporting to them, as well as those of the next level down. For each of these positions, multiple judgements are used to determine their employees' career potential. Recommendations of personnel to fill particular types of positions are circulated world-wide along with available positions to be filled to enable suitable career advancement and appropriate matching. At the highest level of management, the eight inside directors meet once a week as an executive and compensation committee to examine succession planning and employee development of approximately 300 positions.

As part of Exxon's commitment to equal opportunity, managers annually review the top ten women and minorities in their group, describe what they are doing, and plan for their advancement. Additionally, managers review annually the progress of their overall development program.

Career Development and Growth Opportunities

**Rainer Bancorporation**, Seattle, WA
Lynda Lewis, Assistant Vice President, Staff Planning Department
(206) 621-4138

Ranier Bancorporation offers a unique solution to the concerns of productivity, turnover and succession planning through the use of an externally designed training program entitled, "Managing Personal Growth" (MPG). Through this program Ranier is able to assist employees in developing jobs that meet personal and career objectives. Designed as a two-day workshop, MPG helps employees.

- Examine the specific requirements of their jobs
- Identify personal goals, satisfiers, values, talents, limitations and development needs
- Actively seek the support and feedback of their immediate supervisors

Prior to the workshop, participants and their supervisors assess the relative importance of over 70 process skills to their current jobs and levels of performance. Participants complete a motivational assessment to establish goals and values that go into their personal definitions of "job satisfaction." Participants then relate specific work activities to these values and goals. A job-focused action plan is designed to increase personal satisfaction by capitalizing on strengths, overcoming deficiencies, and improving on-the-job effectiveness. The company reports that the program:

- Boosts motivation, morale and job satisfaction
- Reduces stress, discontent and unrealistic job expectations
- Stimulates employees to make better use of their talents

**UNCLEAR WORK ROLE**

Organizations are networks of interconnected roles where employees are asked to perform tasks and take on jobs with their fellow workers. When these tasks and roles are clearly defined, and the rules of the game clearly stated, employees have a good grasp of what is expected of them, and are generally able to perform their jobs without much difficulty.

In healthy companies these expectations and rewards are clearly visible for all to see. Employees know what the goals are, what a good job looks like, and how their performance will be evaluated.

In unhealthy companies expectations and rewards are unclear, leading to various health and performance consequences. Examples of these situations might include:

- jobs where there is confusion about ones tasks and responsibilities;
- jobs where the goals, expectations or criteria for evaluation are unclear or unstated;
- jobs where workers have responsibility for other employees but the organization does not give them sufficient authority to manage them, and;
- conflicting demands from different supervisors and/or departments.

In each case, the lack of clarity about one's job role can be frustrating, stressful, and a potential health hazard.

## Research Findings

- Various research shows that "conflicting job demands" and "conflicts about one's role" at work are associated with increases in hypertension, ulcers, abnormal EKG, and tension. Workers also report lower job satisfaction and decreased self-esteem.[67,68,69,70]

- Boundary employees, defined as those who work inside and outside of their organizations, (such as sales personnel and administrators) frequently feel responsible for and responsive to people and things they cannot control. Disease incidence is significantly higher in people in boundary positions, such as sales personnel and administrators, than it is for people whose roles are inside the organization. For example, boundary employees report increased blood pressure and tension.[71]

## Corporate Approaches

Following is an example of a corporate solution to the problem of job role stress.

IBM, Armonk, NY
R. R. Westmoreland, Program Manager
(914) 765-1900

At IBM performance planning and priority setting are critical to the development of human resources. One program in particular, the "Performance Planning Counseling and Evaluation" process enlists managers and their subordinates to collaborate in planning employee goals.

- A series of jointly developed work objectives are specified for weekly, near term (six months, one year) and long-term goals. These work objectives provide a baseline for ongoing performance assessment. Performance appraisals include objective and subjective information.

- On a daily basis, managers coach employees by helping them reach specified goals. At IBM, this is an important part of the supervisory process.

- Periodic reviews are made at the discretion of the manager and the employee.

- All new hires and those who have recently changed jobs receive a formal six month appraisal.

- IBM employees always have the opportunity to question the performance planning process. A long-standing open door policy gives employees the freedom to appeal a decision at any point inside the organization. In addition, the "Speak-Up" program provides employees with the opportunity to question and complain about any aspect of the IBM experience through a confidential system. Over 15,000 comments are received each year. The informal "Skip-Level Interviewing" process gives employees a chance to talk openly with top executives. Employees gain a broader view of the organization, its goals, and where their own growth might lead.

- Opinion surveys are administered in each unit on an eighteen-month cycle to provide top management information on employee needs and concerns.

- IBM invests $500 million per year in employee education and training. Each "People Manager" receives over 40-hours of training per year.

## POORLY MANAGED CHANGE

Constant change inside organizations can be a disruptive form of organizational stress and a potential health hazard for employees. Much of the change has been caused by the rapid transition from an industrial, labor-based economy to a technologically-advanced, information-based one creating new demands and new forms of work for many employees.

The advent of new technologies, such as robotics and computers, has brought with it an increased level of insecurity as workers fear that their jobs may be phased out. Millions of other workers fear job insecurity because of factors such as automation, strict attendance policies, job reclassifications, cutbacks, and discriminatory policies. For others, the fear of layoffs and the ongoing threat of unemployment can be devastating to their own health and the health of their families.

Other examples of potentially unhealthy organizational change include frequent job changes and relocations, rapid alterations in the type of work, poorly managed mergers and acquisitions.

The historical failure of companies to recognize the negative effects of these changes and to build in systematic methods for supporting people through the change process leads workers to feel out of control, helpless, and uncertain about their future. Organizational changes like these are potentially damaging to all those involved, and workers may either develop stress symptoms or respond by sabotaging the change process.

### Research Findings

Studying the impact of change and new technologies on worker health is a complex task. However, there is research that

indicates that poorly managed organizational changes have direct health as well as job productivity consequences.

- O Excessive organizational change has been associated with somatic symptoms, heart disease, anxiety, and decreased job performance.[72]
- o A study of male workers waiting for the termination of their jobs because of a plant closure noted psychological changes in mood and self-identity of the workers. Physiological changes occurred as well, indicating an increased likelihood of coronary disease, diabetes, ulcers, and gout.[74]
- o Data from Johns Hopkins University indicates that every one percent increase in national unemployment is associated with an additional 36,887 deaths, including 20,440 from heart disease. There is an attendant increase in alcoholism, crime, family violence, psychological disorders, and hospital admissions.[75]
- o Fear of lay-offs and job insecurity place many additional workers and their families at risk of stress disorders.

Corporate Approaches

Following are some examples of corporate programs designed to protect workers against the stressful effects of technology and organizational change.

- o Prepare/Educate Workers About Upcoming Change and Implementation Process
- o Skills Training and Retooling Programs
- o Cross Training/Job Sharing
- o Job Security Contracts/Programs

Prepare/Educate Workers About Upcoming Change and Implementation Process

**Deere & Company**, Moline, IL
James V. Gayle, Manager, Employee Participation
(309) 752-4061

To ensure that line workers have a full understanding of how new machinery works, Deere sends its employees to the machine's manufacturer. Workers also visit other plants to see how new equipment and procedures are being implemented. Frequently, production workers visit their customers and dealers to determine their needs, discuss problems with existing products, and actually operate the equipment in the field. This gives employees a sense of the entire product, from development to customer contact.

Skills Training and Retooling Programs

**General Motors**, Detroit, MI
John Grix
(313) 492-7128

Beginning in 1982, and renegotiated in 1984, General Motors and the United Auto Workers combined forces to develop an extensive skill development and retraining program for employees "who were on lay-off." Two separate programs were implemented: one to retrain laid-off workers, and a second to prevent future job obsolescence. The first program (financed through 5¢/hour/UAW employee) funded a "Human Resource Center" where laid-off GM/UAW workers could be retrained, counseled and placed into new jobs. In 1981, $40 million was earmarked for this program. A second program, implemented in five regional training centers, was more preventive in nature, upgrading existing skills of employees and ensuring that their skills remain competitive with the changing technologies.

Cross Training/Job Sharing

**Nissan Motor Manufacturing Company, USA**, Smyrna, TN
Hugh Harris, Director, Personnel Relations
(615) 355-2200

Nissan's "Cross Training/Pay for Versatility" program provides employees with opportunities to be financially compensated for broadening their work skills.

- In the cross-training program, assembly-line workers are taught a variety of jobs and skills. Each employee is required to learn each job in his/her supervisor's "zone." Workers rotate jobs every few hours, especially in jobs

that are repetitious. The company reports that the program boosts morale, reduces stressful, monotonous work, and decreases the frequency of wrist, shoulder, and lower back ailments.

- The "Pay for Versatility" program supports the cross-training by linking skill development to financial compensation. All manufacturing employees are eligible for the program after three years or following a transfer to another department. Cross training is made available across a number of skill areas. If an employee participates, he/she receives a bonus of 25¢/hour for production workers and 30¢/hour for maintenance workers. The bonus is retained if the worker remains open to cross-training opportunities. Company reports that employee skills are constantly evolving, reducing the threat of job obsolescence.

Job Security Contracts/Programs

**Delta Air Lines, Inc.**, Atlanta, GA
Jackie Pate, Manager, Public Relatiaons
(704) 765-2342

Delta's long-standing policy of promoting from within the company in filling supervisory, management, and higher level administrative and staff functions is considered vital to the success of the organization. Over the years Delta has also avoided using involuntary furloughs to cut labor costs, and has striven to hold to this policy even when downturns in business left the company temporarily over staffed. Delta believes that although its competitors may gain short-run advantages, the consistency of its promotion and layoff policies wins the long-range battle with higher morale and greater productivity.

An additional benefit is that individuals in the organization know they have job security and an opportunity for advancement. They are not competing with unknown individuals from outside the company. Over time, employees get to know the business and management gets to know its people.

Promotion from within places a heavy responsibility on the initial employment function. Those who join Delta must be willing to commit themselves to the organization, and must be capable of growing and undertaking more tasks and duties.

## WORK/FAMILY/LEISURE CONFLICTS

Job demands compete head-on with other interests and responsibilities outside of work, for example, family, education, leisure and strong avocational interests. Many workers pursue several careers in a lifetime, and are involved in numerous hobbies and educational activities outside the workplace. Employees are striving to improve their overall "quality-of-life," yet feel pressured by a lack of time to accomplish these work and nonwork activities. Job demands and leisure interests inevitably compete for limited time, potentially resulting in unhealthy stress and productivity problems.

Work and leisure conflicts are manifest in family life as well. With increasing numbers of working women and two-career families, many parents must balance career pursuits, child rearing, and an intimate relationship simultaneously. The problems of single parent families are even more pronounced. Aging parents, young children, family illness, and work deadlines often compete for attention. The health and performance effects of these conflicting work and family roles can be overwhelming.

Unfortunately, most corporations have overlooked how family and leisure conflicts affect their bottom line, and continue to design policies to meet the needs of the traditional working male breadwinner and his homebound wife/mother, rather than meeting the needs of the new work and family roles.

**Work and Family Stress**--The following points highlight the seriousness of the growing health and productivity problems associated with work and family conflicts.

- There has been a dramatic increase in working women and working mothers[76]
- Women return to work sooner after pregnancy[77]

- o Insufficient child care services limit adequate supervision[78]
- o There has been a rise in single-parent families[77]

The message from these statistics is clear. Women are entering the workforce at an accelerated pace. Most are raising children -- infants, toddlers, and school-age--usually while they work. Many are married, an increasing number are not. The impact of these conditions on family health and work performance are costly in terms of increased absenteeism, turnover, and stress-related ailments, making this issue a major business and public health problem.

## Research Findings

Only a limited number of studies have looked explicitly at how work and non-work demands combine to influence health and productivity. Even fewer studies have focused specifically on the work and family conflict.

- o When Honeywell, Inc., surveyed its employees in 1980, it found that one of four working parents believed that stress caused by child care problems interfered with their productivity, and caused high absenteeism.[79]
- o A study at Texas Women's University showed that a $50,000 investment in a day-care program can save some $3 million in employee turnover, training and lost work time.[80]
- o A national study recently conducted by the Child Care Information Service of Pasadena, CA, surveyed 415 employers who provide some form of assistance to their employees who must use child care. According to the employers, providing child care assistance was a positive factor in the following ways: attracting employees, lowering absenteeism and job turnover rates, increasing productivity, and improving employee morale.[81]

## Corporate Approaches

Employers are addressing the needs of working parents in a variety of ways, which fall into three categories: (1) providing information about work and family issues (e.g. information to help parents locate day care); (2) providing or subsidizing child care (e.g., financial assistance, vouchers, in-kind services, building child care centers); and (3) adjusting personnel policies and work options to accommodate to families (e.g. flextime, job sharing/part-time, maternity, paternity leave, sick days for child care).

### Information-Based Programs

**Honeywell, Inc.**, Minneapolis, MN
James Widfelt, Associate Director, Quality Management Systems
(612) 931-7593

Honeywell donated $25,000 and staff time to help three day care agencies develop a computerized child care information network. The service collects, updates and exchanges data on child care programs. Honeywell also has a working parent resource coordinator who shapes policy and acts as liaison between parent employees, their supervisors, educators in the community, and representatives of outside companies.

### Changing Personnel Policies/Work Options

**Hewlett-Packard**, Palo Alto, CA
Frank Williams, Manager of Communications
(415) 857-8425

Consistent with Hewlett-Packard philosophy that individuals are responsible for their own development and performance, the company also gives workers the freedom to control their own time.

- Hewlett-Packard employees can work any eight hour shift each day with the approval of their supervisor. There are no time clocks.

- A "Flexible Time Off" policy gives workers maximum freedom to control their own off-work time. There is no specific sick leave or vacation time. Rather, employees are given a preset number of "personal" days to be managed by the individual employee. This recognizes the tremendous diversity in workers' lifestyles.

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# All About WBGH

The Washington Business Group on Health (WBGH), established in 1974, gives major employers a credible voice in the formulation of federal and state health policy. WBGH began with five companies and now works with more than 200 of the Fortune 500. WBGH members direct health care purchasing for 40 million of their employees, retirees and dependents.

In 1976, WBGH expanded to become the first national employer organization dedicated to medical care cost management. WBGH is an active participant in discussions, hearings and other aspects of the legislative and regulatory arena. It also serves as a reliable resource base providing information and expertise on a variety of health care issues and concerns as well as consulting to its members, government, other employers, health care providers, and the media.

WBGH, through its institutes and public policy division, provides long-range planning and analysis on many sensitive economic and social issues. As specific areas of need were identified, WBGH formed: the Institute on Aging, Work and Health; the Institute for Rehabilitation and Disability Management; the Institute on Organizational Health; and Family Health Programs. WBGH also publishes two magazines, *Business & Health* and *Corporate Commentary*, and other resource information, reports, studies, and surveys.

WGBH assists the business community through: the Policy Exchange telecommunications network; an annual conference to discuss new health policy issues, cost management strategies, benefit design solutions and health promotion ideas; formation of nationally recognized task forces on topics ranging from legal issues of interest to employers to tax policy; and numerous seminars on timely subjects such as AIDS and utilization data. WBGH has been instrumental in helping form over 35 local business health care coalitions across the country.